

L8 ANSWER 1 OF 3 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
 AN 2005:547565 BIOSIS
 DN PREV200510344179
 TI Detection of **Fusarium** species infecting corn using the
 polymerase chain reaction.
 AU Beck, James Joseph [Inventor]; **Barnett, Charles Jason** [Inventor]
 CS Morrisville, NC USA
 ASSIGNEE: Syngenta Participations AG
 PI US 06846631 20050125
 SO Official Gazette of the United States Patent and Trademark Office Patents,
 (JAN 25 2005)
 CODEN: OGUPE7. ISSN: 0098-1133.
 DT Patent
 LA English
 ED Entered STN: 7 Dec 2005
 Last Updated on STN: 7 Dec 2005
 AB The present invention relates to the use of primers in polymerase chain
 reaction assays for the detection of a **Fusarium**
proliferatum, *F. verticillioides* and *F. subglutinans*.
 Specific primers are identified as being useful for the identification of
 fungal isolates using PCR based techniques.
 TI Detection of **Fusarium** species infecting corn using the
 polymerase chain reaction.
 AU Beck, James Joseph [Inventor]; **Barnett, Charles Jason** [Inventor]
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 reaction assays for the detection of a **Fusarium**
proliferatum, *F. verticillioides* and *F. subglutinans*.
 Specific primers are identified as being useful for the identification of
 fungal isolates using PCR based techniques.
 IT Methods & Equipment
 polymerase chain reaction: laboratory techniques, genetic techniques;
Fusarium species detection method: laboratory techniques,
 genetic techniques
 ORGN Classifier
 Fungi Imperfecti or Deuteromycetes 15500
 Super Taxa
 Fungi; Plantae
 Organism Name
Fusarium proliferatum (species): pathogen
Fusarium subglutinans (species): pathogen
Fusarium verticillioides (species): pathogen
 Taxa Notes
 Fungi, Microorganisms, Nonvascular Plants, Plants
 ORGN Classifier
 Gramineae 25305
 Super Taxa
 Monocotyledones; Angiospermae; Spermatophyta; Plantae

=> d l8 1-3 bib ab kwic

L8 ANSWER 1 OF 3 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
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TI Detection of **Fusarium** species infecting corn using the polymerase chain reaction.

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IT Methods & Equipment
polymerase chain reaction: laboratory techniques, genetic techniques;
Fusarium species detection method: laboratory techniques, genetic techniques

ORGN Classifier
Fungi Imperfecti or Deuteromycetes 15500
Super Taxa
Fungi; Plantae
Organism Name
Fusarium proliferatum (species): pathogen
Fusarium subglutinans (species): pathogen
Fusarium verticillioides (species): pathogen
Taxa Notes
Fungi, Microorganisms, Nonvascular Plants, Plants

ORGN Classifier
Gramineae 25305
Super Taxa
Monocotyledones; Angiospermae; Spermatophyta; Plantae

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
AN 2005:4765 CAPLUS
DN 142:350155
TI Leaf axil sampling of midwest U.S. maize for mycotoxigenic **Fusarium** fungi using PCR analysis
AU Dowd, Patrick F.; **Barnett, C. Jason**; Johnson, Eric T.; Beck, James J.
CS U.S.D.A., Agricultural Research Service, National Center for Agricultural Utilization Research, Peoria, IL, 61614, USA
SO Mycopathologia (2004), 158(4), 431-440
CODEN: MYCPAH; ISSN: 0301-486X
PB Kluwer Academic Publishers
DT Journal
LA English
AB PCR anal. was used to detect **Fusarium** species generically, as well as the mycotoxin-producing species **F. subglutinans**, **F. proliferatum**, and **F. verticillioides** in leaf axil and other maize tissues during ear fill in a multiyear study in central Illinois. The frequency of **Fusarium** detected varied from site to site and year to year. **Fusarium** was generically detected more frequently in leaf axil material than in leaf/husk lesions. In two growing seasons, the leaf axil samples were also tested for the presence of the mycotoxin producing species **F. proliferatum**, **F. subglutinans**, and **F. verticillioides**. Overall, **F. proliferatum** and **F. verticillioides** were detected less often than **F. subglutinans**. **Fusarium** was generically and specifically detected most commonly where visible fungal growth was present in leaf axil material.

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Leaf axil sampling of midwest U.S. maize for mycotoxigenic **Fusarium** fungi using PCR analysis
AU Dowd, Patrick F.; **Barnett, C. Jason**; Johnson, Eric T.; Beck, James J.
AB PCR anal. was used to detect **Fusarium** species generically, as well as the mycotoxin-producing species **F. subglutinans**, **F. proliferatum**, and **F. verticillioides** in leaf axil and other maize tissues during ear fill in a multiyear study in central Illinois. The frequency of **Fusarium** detected varied from site to site and year

.to..year. **Fusarium** was generically detected more frequently in leaf axil material than in leaf/husk lesions. In two growing seasons, the leaf axil samples were also tested for the presence of the mycotoxin producing species **F. proliferatum**, **F. subglutinans**, and **F. verticillioides**. Overall, **F. proliferatum** and **F. verticillioides** were detected less often than **F. subglutinans**. **Fusarium** was generically and specifically detected most commonly where visible fungal growth was present in leaf axil material.

ST leaf axil US maize mycotoxin **Fusarium** fungi PCR analysis
IT Fungi

Fusarium
Growth, microbial
Leaf
PCR (polymerase chain reaction)
(leaf axil sampling of midwest U.S. maize for mycotoxigenic **Fusarium** fungi using PCR anal.)

IT Mycotoxins
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(leaf axil sampling of midwest U.S. maize for mycotoxigenic **Fusarium** fungi using PCR anal.)

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:255863 CAPLUS

TI Detection of **fusarium** species infecting corn using the polymerase chain reaction

IN Beck, James Joseph; **Barnett, Charles Jason**

PA Syngenta Participations Ag, Switz.

SO PCT Int. Appl.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003027635	A2	20030403	WO 2002-US30311	20020919
	WO 2003027635	A3	20030904		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003113722	A1	20030619	US 2001-961755	20010924
	US 6846631	B2	20050125		
	US 2004259120	A1	20041223	US 2004-773904	20040206
	US 2004259121	A1	20041223	US 2004-773905	20040206
PRAI	US 2001-961755	A	20010924		

AB The present invention relates to the use of primers in polymerase chain reaction assays for the detection of a **Fusarium proliferatum**, **F. verticillioides** and **F. subglutinans**. Specific primers are identified as being useful for the identification of fungal isolates using PCR based techniques.

TI Detection of **fusarium** species infecting corn using the polymerase chain reaction

IN Beck, James Joseph; **Barnett, Charles Jason**

AB The present invention relates to the use of primers in polymerase chain reaction assays for the detection of a **Fusarium proliferatum**, **F. verticillioides** and **F. subglutinans**. Specific primers are identified as being useful for the identification of fungal isolates using PCR based techniques.

=> s polymerase chain reaction (10a)fusarium(10a)detect###

L9 73 POLYMERASE CHAIN REACTION (10A) FUSARIUM(10A) DETECT###

=> s,l9..and,(proliferatum or subglutinans)
L10 8 L9 AND (PROLIFERATUM OR SUBGLUTINANS)

=> dup rem l10
PROCESSING COMPLETED FOR L10
L11 8 DUP REM L10 (0 DUPLICATES REMOVED)

=> d l11 1-8 bib ab kwic
'LL1' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid
in at least one of the files. Refer to file specific help messages
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individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):end

=> d l11 1-8 bib ab kwic

L11 ANSWER 1 OF 8 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
AN 2005:547565 BIOSIS
DN PREV200510344179
TI **Detection of *Fusarium* species infecting corn using the
polymerase chain reaction.**
AU Beck, James Joseph [Inventor]; Barnett, Charles Jason [Inventor]
CS Morrisville, NC USA
ASSIGNEE: Syngenta Participations AG
PI US 06846631 20050125
SO Official Gazette of the United States Patent and Trademark Office Patents,
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CODEN: OGUPE7. ISSN: 0098-1133.
DT Patent
LA English
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chain reaction** assays for the **detection** of a
Fusarium proliferatum, *F. verticillioides* and *F.*
subglutinans. Specific primers are identified as being useful for
the identification of fungal isolates using PCR based techniques.
TI **Detection of *Fusarium* species infecting corn using the
polymerase chain reaction.**
AB The present invention relates to the use of primers in **polymerase
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Fusarium proliferatum, *F. verticillioides* and *F.*
subglutinans. Specific primers are identified as being useful for
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ORGN Classifier
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Super Taxa
Fungi; Plantae
Organism Name
Fusarium **proliferatum** (species): pathogen
Fusarium **subglutinans** (species): pathogen
Fusarium verticillioides (species): pathogen
Taxa Notes
Fungi, Microorganisms, Nonvascular Plants, Plants
ORGN Classifier
Gramineae 25305
Super Taxa
Monocotyledones; Angiospermae; . . .

L11 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:514168 CAPLUS
DN 141:168639
TI Detection and quantification of airborne conidia of *Fusarium circinatum*,
the causal agent of pine pitch canker, from two California sites by using
a real-time PCR approach combined with a simple spore trapping method
AU Schweigkofler, Wolfgang; O'Donnell, Kerry; Garbelotto, Matteo
CS Department of Environmental Science, Policy, and Management, University of
California, Berkeley, CA, 94720, USA

SO .Applied and Environmental Microbiology (2004), 70(6), 3512-3520
 CODEN: AEMIDF; ISSN: 0099-2240
 PB American Society for Microbiology
 DT Journal
 LA English
 AB *Pinus radiata* (Monterey pine), a tree native to coastal California and Mexico, is widely planted worldwide for timber production. A major threat to Monterey pine plantations is the fungal disease pine pitch canker, caused by *Fusarium circinatum* (Hypocreales). We present a novel trapping approach using filter paper in combination with a rapid mol. method to detect the presence of inoculum in the air. The assay is also useful for diagnosing the presence of the pathogen on plants. The test is based on the *F. circinatum* specific primer pair CIRC1A-CIRC4A, which amplifies a 360-bp DNA fragment in the intergenic spacer region of the nuclear ribosomal operon. Real-time PCR was used to calculate the number of fungal spores present in each reaction mixture by comparing the threshold cycle (Ct) of unknown spore samples to the Ct values of stds. with known amts. of *F. circinatum* spores. The filter paper method allows prolonged and more sensitive spore sampling in the field compared to traditional traps using petri dishes filled with selective medium. A field test at two sites in coastal California infested with pine pitch canker was carried out during the summer and fall of 2002. Spore counts were in the range of ca. 1 + 103 to ca. 7 + 105/m², with the highest spore counts in the fall, suggesting a seasonal fluctuation.

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT *Fusarium*
Fusarium anthophilum
Fusarium bactridioides
Fusarium begoniae
Fusarium bulbicola
Fusarium circinatum
Fusarium concentricum
Fusarium fractiflexum
Fusarium globosum
Fusarium oxysporum
Fusarium proliferatum
Fusarium pseudoanthophilum
Fusarium subglutinans
Fusarium succisae
Gibberella circinata
Gibberella fujikuroi
Gibberella moniliformis
Gibberella thapsina
 (detection of *Fusarium circinatum*, the causal agent of pine pitch canker, using spore trapping and real-time PCR)

IT PCR (polymerase chain reaction)
 (real-time; detection of *Fusarium circinatum*, the causal agent of pine pitch canker, using spore trapping and real-time PCR)

L11 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:70952 CAPLUS
 DN 140:400808
 TI Specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences
 AU Mule, Giuseppina; Susca, Antonia; Stea, Gaetano; Moretti, Antonio
 CS Institute of Sciences of Food Production, CNR, Bari, 70125, Italy
 SO FEMS Microbiology Letters (2004), 230(2), 235-240
 CODEN: FMLED7; ISSN: 0378-1097
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB *Fusarium proliferatum* and *Fusarium oxysporum* are the causal agents of a destructive disease of asparagus called *Fusarium* crown and root rot. *F. proliferatum* from asparagus produces fumonisin B1 and B2, which have been detected as natural contaminants in infected asparagus plants. Polymerase chain reaction (PCR) assays were developed

for the rapid identification of *F. proliferatum* and *F. oxysporum* in asparagus plants. The primer pairs are based on calmodulin gene sequences. The PCR products from *F. proliferatum* and *F. oxysporum* were 526 and 534 bp long, resp. The assays were successfully applied to identify both species from the vegetative part of the plants.

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences

AB *Fusarium proliferatum* and *Fusarium oxysporum* are the causal agents of a destructive disease of asparagus called *Fusarium* crown and root rot. *F. proliferatum* from asparagus produces fumonisin B1 and B2, which have been detected as natural contaminants in infected asparagus plants. Polymerase chain reaction (PCR) assays were developed for the rapid identification of *F. proliferatum* and *F. oxysporum* in asparagus plants. The primer pairs are based on calmodulin gene sequences. The PCR products from *F. proliferatum* and *F. oxysporum* were 526 and 534 bp long, resp. The assays were successfully applied to identify both species from the vegetative part of the plants.

IT Gene, plant

RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)

(cld; specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences)

IT Mycosis

(crown rot, root rot; specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences)

IT Diagnosis

(mol.; specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences)

IT *Asparagus officinalis*

DNA sequences

Fusarium oxysporum

Fusarium proliferatum

PCR (polymerase chain reaction)

(specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences)

IT Calmodulins

Primers (nucleic acid)

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences)

IT Protein sequences

(specific detection of toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences)

IT 688366-75-8 688366-77-0

RL: AGR (Agricultural use); ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(PCR primer for *Fusarium oxysporum*; specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences)

IT 688366-74-7 688366-76-9

RL: AGR (Agricultural use); ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(PCR primer for *Fusarium proliferatum*; specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences)

IT 578695-76-8 578695-78-0 578695-80-4 578695-82-6

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL

(Biological study)
 (amino acid sequence; specific detection of the toxigenic species
Fusarium proliferatum and *F. oxysporum* from asparagus plants
 using primers based on calmodulin gene sequences)

IT 578695-75-7 578695-77-9 578695-79-1 578695-81-5
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)
 (nucleotide sequence; specific detection of the toxigenic species
Fusarium proliferatum and *F. oxysporum* from asparagus plants
 using primers based on calmodulin gene sequences)

L11 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:212996 CAPLUS
 DN 141:326305
 TI Specific detection of the toxigenic species *Fusarium proliferatum*
 and *F. oxysporum* from asparagus plants using primers based on calmodulin
 gene sequences. [Erratum to document cited in CA140:400808]
 AU Mule, Giuseppina; Susca, Antonia; Stea, Gaetano; Moretti, Antonio
 CS CNR, Institute of Sciences of Food Production, Bari, 70125, Italy
 SO FEMS Microbiology Letters (2004), 232(2), 229
 CODEN: FMLED7; ISSN: 0378-1097
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB In Table 1, the wrong sequence was given for primer CLPRO2. The correct
 nucleotide sequence is: 5'-TGTCAGTAACTCGACGTTGTTGTT-3' (CLPRO2).
 TI Specific detection of the toxigenic species *Fusarium proliferatum*
 and *F. oxysporum* from asparagus plants using primers based on calmodulin
 gene sequences. [Erratum to document cited in CA140:400808]
 IT Gene, plant
 RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)
 (cld; specific detection of the toxigenic species *Fusarium*
proliferatum and *F. oxysporum* from asparagus plants using
 primers based on calmodulin gene sequences (Erratum))

IT Mycosis
 (crown rot, root rot; specific detection of the toxigenic species
Fusarium proliferatum and *F. oxysporum* from asparagus plants
 using primers based on calmodulin gene sequences (Erratum))

IT Diagnosis
 (mol.; specific detection of the toxigenic species *Fusarium*
proliferatum and *F. oxysporum* from asparagus plants using
 primers based on calmodulin gene sequences (Erratum))

IT Asparagus officinalis
 DNA sequences
Fusarium oxysporum
Fusarium proliferatum
 PCR (polymerase chain reaction)
 (specific detection of the toxigenic species *Fusarium*
proliferatum and *F. oxysporum* from asparagus plants using
 primers based on calmodulin gene sequences (Erratum))

IT Calmodulins
 Primers (nucleic acid)
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)
 (specific detection of the toxigenic species *Fusarium*
proliferatum and *F. oxysporum* from asparagus plants using
 primers based on calmodulin gene sequences (Erratum))

IT Protein sequences
 (specific detection of toxigenic species *Fusarium proliferatum*
 and *F. oxysporum* from asparagus plants using primers based on
 calmodulin gene sequences (Erratum))

IT 688366-75-8 688366-77-0
 RL: AGR (Agricultural use); ARG (Analytical reagent use); PRP
 (Properties); ANST (Analytical study); BIOL (Biological study); USES
 (Uses)
 (PCR primer for *Fusarium oxysporum*; specific detection of the toxigenic
 species *Fusarium proliferatum* and *F. oxysporum* from asparagus
 plants using primers based on calmodulin gene sequences (Erratum))

IT 688366-74-7 688366-76-9
 RL: AGR (Agricultural use); ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (PCR primer for *Fusarium proliferatum*; specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences (Erratum))

IT 578695-76-8 578695-78-0 578695-80-4 578695-82-6
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
 (amino acid sequence; specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences (Erratum))

IT 578695-75-7 578695-77-9 578695-79-1 578695-81-5
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
 (nucleotide sequence; specific detection of the toxigenic species *Fusarium proliferatum* and *F. oxysporum* from asparagus plants using primers based on calmodulin gene sequences (Erratum))

L11 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:255863 CAPLUS
 TI **Detection of fusarium species infecting corn using the polymerase chain reaction**
 IN Beck, James Joseph; Barnett, Charles Jason
 PA Syngenta Participations Ag, Switz.
 SO PCT Int. Appl.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003027635	A2	20030403	WO 2002-US30311	20020919
	WO 2003027635	A3	20030904		
	W:		AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
	RW:		GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
	US 2003113722	A1	20030619	US 2001-961755	20010924
	US 6846631	B2	20050125		
	US 2004259120	A1	20041223	US 2004-773904	20040206
	US 2004259121	A1	20041223	US 2004-773905	20040206
PRAI	US 2001-961755	A	20010924		

AB The present invention relates to the use of primers in **polymerase chain reaction** assays for the **detection** of a *Fusarium proliferatum*, *F. verticillioides* and *F. subglutinans*. Specific primers are identified as being useful for the identification of fungal isolates using PCR based techniques.

TI **Detection of fusarium species infecting corn using the polymerase chain reaction**

AB The present invention relates to the use of primers in **polymerase chain reaction** assays for the **detection** of a *Fusarium proliferatum*, *F. verticillioides* and *F. subglutinans*. Specific primers are identified as being useful for the identification of fungal isolates using PCR based techniques.

L11 ANSWER 6 OF 8 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
 AN 2004:223314 BIOSIS
 DN PREV200400217673
 TI Development and design of a marker based on **polymerase chain reaction** for the **detection** of

Fusarium proliferatum isolates from field-grown asparagus.

AU Labour, K. [Reprint Author]; St.-Arnaud, M.; Jabaji-Hare, S. H. [Reprint Author]

CS Department of Plant Science, McGill University, 21 111 Lakeshore Road, Sainte-Anne-de-Belle, QC, H9X 3V9, Canada

SO Canadian Journal of Plant Pathology, (December 2003) Vol. 25, No. 4, pp. 428-429. print.
Meeting Info.: 2003 Annual Meeting of the Canadian Phytopathological Society. Montreal, Quebec, Canada. Canadian Phytopathological Society. CODEN: CJPPD6. ISSN: 0706-0661.

DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 21 Apr 2004
Last Updated on STN: 21 Apr 2004

TI Development and design of a marker based on **polymerase chain reaction** for the **detection** of **Fusarium proliferatum** isolates from field-grown asparagus.

ORGN Classifier
Fungi Imperfecti or Deuteromycetes 15500
Super Taxa
Fungi; Plantae
Organism Name
Fusarium proliferatum (species): pathogen, field isolates
Taxa Notes
Fungi, Microorganisms, Nonvascular Plants, Plants

L11 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:500871 CAPLUS

DN 131:282085

TI Specific detection of *Fusarium* species in blood and tissues by a PCR technique

AU Hue, Francois-Xavier; Huerre, Michel; Rouffault, Marie Ange; De Bievre, Claude

CS Laboratoire de Mycologie Medicale, Institut Pasteur, Paris, 75724, Fr.

SO Journal of Clinical Microbiology (1999), 37(8), 2434-2438
CODEN: JCMIDW; ISSN: 0095-1137

PB American Society for Microbiology

DT Journal

LA English

AB *Fusarium* species are opportunistic nosocomial pathogens that often cause fatal invasive mycoses. The authors designed a primer pair that amplifies by PCR a fragment of a gene coding for the rRNA of *Fusarium* species. The DNAs of the main *Fusarium* species and *Neocosmospora vasinfecta* but not the DNAs from 11 medically important fungi were amplified by these primers. The lower limit of detection of the PCR system was 10 fg of *Fusarium solani* DNA by ethidium bromide staining. To test the ability of this PCR system to detect *Fusarium* DNA in tissues, the authors developed a mouse model of disseminated fusariosis. Using the PCR, the authors detected *Fusarium* DNA in mouse tissues and in spiked human blood. Furthermore, *F. solani*, *Fusarium moniliforme*, and *Fusarium oxysporum* were testing by random amplified polymorphic DNA (RAPD) anal. The bands produced by RAPD anal. were purified, cloned, and sequenced. The information was used to design primer pairs that selectively amplified one or several *Fusarium* species. The method developed may be useful for the rapid detection and identification of *Fusarium* species both from culture and from clin. samples.

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Blood analysis
Fusarium anthophilum
Fusarium chlamydosporum
Fusarium dimerum
Fusarium equiseti
Fusarium moniliforme
Fusarium oxysporum
Fusarium pallidoroseum

Fusarium **proliferatum**
Fusarium solani
Fusarium **subglutinans**
Gerlachia nivalis
Neocosmospora vasinfecta
PCR (**polymerase chain reaction**)
(specific **detection** of **Fusarium** species in blood
and tissues by PCR technique)

L11 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1998:537636 CAPLUS
DN 129:286455
TI A PCR-ELISA for the detection of potential fumonisin producing Fusarium
species
AU Grimm, C.; Geisen, R.
CS Federal Research Centre for Nutrition, Karlsruhe, 76121, Germany
SO Letters in Applied Microbiology (1998), 26(6), 456-462
CODEN: LAMIE7; ISSN: 0266-8254
PB Blackwell Science Ltd.
DT Journal
LA English
AB A PCR-ELISA for the detection of potential fumonisin producing Fusarium
species has been developed, using the ribosomal ITS1 sequence as target.
For this purpose, the sequences of the ITS1 regions of different fumonisin
producing Fusarium species have been determined and compared to the sequences
of fumonisin non-producing species. In general, the ITS1 sequences were
highly homologous. However, some minor sequence polymorphisms were
detected, which differentiates potential fumonisin producing Fusarium
species from non-producing species. By using these sequence differences,
a PCR-ELISA for potential fumonisin producing Fusarium species was
developed. All other ubiquitously occurring food-borne fungi tested
showed neg. results with this test.
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
IT Aspergillus flavus
DNA sequences
Fusarium moniliforme
Fusarium napiforme
Fusarium nygamai
Fusarium poae
Fusarium **proliferatum**
Fusarium solani
PCR (**polymerase chain reaction**)
Penicillium digitatum
Penicillium italicum
(PCR-ELISA for **detection** of potential fumonisin producing
Fusarium species)

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(FILE 'HOME' ENTERED AT 13:29:12 ON 12 MAY 2006)

FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE' ENTERED AT 13:29:40 ON 12 MAY 2006

L1 6874 S BECK J?/AU
L2 13 S L1 AND FUSARIUM
L3 5 S L2 AND (SUBGLUTINANS OR PROLIFERATUM)
L4 3 DUP REM L3 (2 DUPLICATES REMOVED)
L5 1421 S BARNETT C?/AU
L6 5 S L5 AND FUSARIUM
L7 5 S L6 AND (SUBGLUTINANS OR PROLIFERATUM)
L8 3 DUP REM L7 (2 DUPLICATES REMOVED)
L9 73 S POLYMERASE CHAIN REACTION (10A) FUSARIUM(10A) DETECT###
L10 8 S L9 AND (PROLIFERATUM OR SUBGLUTINANS)
L11 8 DUP REM L10 (0 DUPLICATES REMOVED)

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